

In the claims.

No changes are made to the claims. The claims are provided here merely for ease of reference.

1. (Previously entered) A method for conserving power in a positioning system receiver used in connection with a positioning system providing ranging signals, the receiver using the ranging signals to determine a state of motion of the receiver, the method comprising:

a) a step (32) of performing at least a predetermined number of solutions of the state of motion of the receiver using a filter solution based on a mix of models of the motion of the receiver, a mix that is varied from one solution to the next according to a predetermined criteria, and of providing the model mix used in each solution; and

b) a step (35) of adopting a partial duty cycle indicating a percentage of time selected receiver components are powered off, the percentage of time based on the mix of models used in successive solutions;

wherein the step (32) of performing at least a predetermined number of solutions of the state of motion of the receiver is performed at least once during a time in the partial duty cycle when the selected receiver components are powered off.

2. (Original) The method of claim 1, wherein the receiver includes a radiofrequency (RF) front end module and a baseband processor module and further wherein the selected components include the RF front end module.

3. (Original) The method of claim 2, wherein the selected components also include the baseband processor module.

4. (Previously entered) An apparatus for conserving power in a positioning system receiver used in connection with a positioning system providing ranging signals, the receiver using the ranging signals to determine a state of motion of the receiver, the apparatus comprising:

a) means (15) for performing at least a predetermined number of solutions of the state of motion of the receiver using a filter solution based on a mix of models of the motion of the receiver that are varied from one solution to the next according to a predetermined criteria, and for providing the model mix used in each solution; and

b) means (18) for determining a partial duty cycle indicating a percentage of time selected receiver components are powered off, the percentage of time based on the mix of models used in successive solutions;

wherein the means (32) for performing at least a predetermined number of solutions of the state of motion of the receiver is operative during a time in the partial duty cycle when the selected receiver components are powered off.

5. (Original) The apparatus of claim 4, wherein the receiver includes a radiofrequency (RF) front end module and a baseband processor module and further wherein the selected components include the RF front end module.

6. (Original) The apparatus of claim 5, wherein the selected components also include the baseband processor module.

7. (Previously entered) A system, including: a transmitter for transmitting a ranging signal, and a ranging receiver for receiving the ranging signal and for determining a state of motion of the ranging receiver, the ranging receiver characterized in that it includes an apparatus for conserving

power that in turn comprises:

a) means (15) for performing at least a predetermined number of solutions of the state of motion of the ranging receiver using a filter solution based on a mix of models of the motion of the ranging receiver that are varied from one solution to the next according to a predetermined criteria, and for providing the model mix used in each solution; and

b) means (18) for determining a partial duty cycle indicating a percentage of time selected ranging receiver components are powered off, the percentage of time based on the mix of models used in successive solutions;

wherein the means (32) for performing at least a predetermined number of solutions of the state of motion of the receiver is operative during a time in the partial duty cycle when the selected receiver components are powered off.

8. (Original) The system as in claim 7, further comprising a computing resource external to the ranging receiver, and wherein the apparatus communicates information to the computing facility via a wireless communication system and the computing facility uses the information in assisting the apparatus in performing at least a predetermined number of solutions of the state of motion of the ranging receiver using a filter solution based on a mix of models of the motion of the ranging receiver that are varied from one solution to the next according to a predetermined criteria.